

L Number	Hits	Search Text	DB	Time stamp
50	8329	118/715.ccls. or 118/728.ccls. or 118/50.ccls. or 156/345.29.ccls. or 156/345.33.ccls. or 156/345.34.ccls. or 156/345.35.ccls. or 156/345.36.ccls. or 156/345.26.ccls. or 156/345.51.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:48
57	7971	137/262-264.ccls. or 137/454.2 or 137/560.ccls. or 137/561r.ccls. or 137/561a.ccls. or 137/571-576.ccls. or 137/590.ccls. or 137/594-596.ccls. or 137/599.01.ccls. or 137/599.05-599.07.ccls. or 137/602.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:48
64	2223	141/285-286.ccls. or 141/37.ccls. or 141/44-47.ccls. or 141/54.ccls. or 141/301-302.ccls. or 141/367.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:48
71	451	261/127.ccls. or 261/131.ccls. or 261/146-147.ccls. or 261/150.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:48
78	2565	261/19-22.ccls. or 261/23.1.ccls. or 261/40.ccls. or 261/42.ccls. or 261/62-63.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:48
85	6981	261/64.1.ccls. or 261/65.ccls. or 261/75-76.ccls. or 261/94-96.ccls. or 261/100-102.ccls. or 261/105.ccls. or 261/108-109.ccls. or 261/113.ccls. or 261/114.1.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:49
92	27873	(118/715.ccls. or 118/728.ccls. or 118/50.ccls. or 156/345.29.ccls. or 156/345.33.ccls. or 156/345.34.ccls. or 156/345.35.ccls. or 156/345.36.ccls. or 156/345.26.ccls. or 156/345.51.ccls.) or (137/262-264.ccls. or 137/454.2 or 137/560.ccls. or 137/561r.ccls. or 137/561a.ccls. or 137/571-576.ccls. or 137/590.ccls. or 137/594-596.ccls. or 137/599.01.ccls. or 137/599.05-599.07.ccls. or 137/602.ccls.) or (141/285-286.ccls. or 141/37.ccls. or 141/44-47.ccls. or 141/54.ccls. or 141/301-302.ccls. or 141/367.ccls.) or (261/127.ccls. or 261/131.ccls. or 261/146-147.ccls. or 261/150.ccls.) or (261/19-22.ccls. or 261/23.1.ccls. or 261/40.ccls. or 261/42.ccls. or 261/62-63.ccls.) or (261/64.1.ccls. or 261/65.ccls. or 261/75-76.ccls. or 261/94-96.ccls. or 261/100-102.ccls. or 261/105.ccls. or 261/108-109.ccls. or 261/113.ccls. or 261/114.1.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:49
99	4635	((118/715.ccls. or 118/728.ccls. or 118/50.ccls. or 156/345.29.ccls. or 156/345.33.ccls. or 156/345.34.ccls. or 156/345.35.ccls. or 156/345.36.ccls. or 156/345.26.ccls. or 156/345.51.ccls.) or (137/262-264.ccls. or 137/454.2 or 137/560.ccls. or 137/561r.ccls. or 137/561a.ccls. or 137/571-576.ccls. or 137/590.ccls. or 137/594-596.ccls. or 137/599.01.ccls. or 137/599.05-599.07.ccls. or 137/602.ccls.) or (141/285-286.ccls. or 141/37.ccls. or 141/44-47.ccls. or 141/54.ccls. or 141/301-302.ccls. or 141/367.ccls.) or (261/127.ccls. or 261/131.ccls. or 261/146-147.ccls. or 261/150.ccls.) or (261/19-22.ccls. or 261/23.1.ccls. or 261/40.ccls. or 261/42.ccls. or 261/62-63.ccls.) or (261/64.1.ccls. or 261/65.ccls. or 261/75-76.ccls. or 261/94-96.ccls. or 261/100-102.ccls. or 261/105.ccls. or 261/108-109.ccls. or 261/113.ccls. or 261/114.1.ccls.)) and ((lid or cap or top) same (reactor or chamber or vessel or tank or station or hous\$3 or encase\$4 or container))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:53

106	3679	((118/715.ccls. or 118/728.ccls. or 118/50.ccls. or 156/345.29.ccls. or 156/345.33.ccls. or 156/345.34.ccls. or 156/345.35.ccls. or 156/345.36.ccls. or 156/345.26.ccls. or 156/345.51.ccls.) or (137/262-264.ccls. or 137/454.2 or 137/560.ccls. or 137/561r.ccls. or 137/561a.ccls. or 137/571-576.ccls. or 137/590.ccls. or 137/594-596.ccls. or 137/599.01.ccls. or 137/599.05-599.07.ccls. or 137/602.ccls.) or (141/285-286.ccls. or 141/37.ccls. or 141/44-47.ccls. or 141/54.ccls. or 141/301-302.ccls. or 141/367.ccls.) or (261/127.ccls. or 261/131.ccls. or 261/146-147.ccls. or 261/150.ccls.) or (261/19-22.ccls. or 261/23.1.ccls. or 261/40.ccls. or 261/42.ccls. or 261/62-63.ccls.) or (261/64.1.ccls. or 261/65.ccls. or 261/75-76.ccls. or 261/94-96.ccls. or 261/100-102.ccls. or 261/105.ccls. or 261/108-109.ccls. or 261/113.ccls. or 261/114.1.ccls.)) and ((lid or cap or top) same (reactor or chamber or vessel or tank or station or hous\$3 or encase\$4 or container))) and (channels or conduits or pipes or paths)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:53
113	3774	((118/715.ccls. or 118/728.ccls. or 118/50.ccls. or 156/345.29.ccls. or 156/345.33.ccls. or 156/345.34.ccls. or 156/345.35.ccls. or 156/345.36.ccls. or 156/345.26.ccls. or 156/345.51.ccls.) or (137/262-264.ccls. or 137/454.2 or 137/560.ccls. or 137/561r.ccls. or 137/561a.ccls. or 137/571-576.ccls. or 137/590.ccls. or 137/594-596.ccls. or 137/599.01.ccls. or 137/599.05-599.07.ccls. or 137/602.ccls.) or (141/285-286.ccls. or 141/37.ccls. or 141/44-47.ccls. or 141/54.ccls. or 141/301-302.ccls. or 141/367.ccls.) or (261/127.ccls. or 261/131.ccls. or 261/146-147.ccls. or 261/150.ccls.) or (261/19-22.ccls. or 261/23.1.ccls. or 261/40.ccls. or 261/42.ccls. or 261/62-63.ccls.) or (261/64.1.ccls. or 261/65.ccls. or 261/75-76.ccls. or 261/94-96.ccls. or 261/100-102.ccls. or 261/105.ccls. or 261/108-109.ccls. or 261/113.ccls. or 261/114.1.ccls.)) and ((lid or cap or top) same (reactor or chamber or vessel or tank or station or hous\$3 or encase\$4 or container))) and (channels or conduits or pipes or paths)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:54
120	1700	((118/715.ccls. or 118/728.ccls. or 118/50.ccls. or 156/345.29.ccls. or 156/345.33.ccls. or 156/345.34.ccls. or 156/345.35.ccls. or 156/345.36.ccls. or 156/345.26.ccls. or 156/345.51.ccls.) or (137/262-264.ccls. or 137/454.2 or 137/560.ccls. or 137/561r.ccls. or 137/561a.ccls. or 137/571-576.ccls. or 137/590.ccls. or 137/594-596.ccls. or 137/599.01.ccls. or 137/599.05-599.07.ccls. or 137/602.ccls.) or (141/285-286.ccls. or 141/37.ccls. or 141/44-47.ccls. or 141/54.ccls. or 141/301-302.ccls. or 141/367.ccls.) or (261/127.ccls. or 261/131.ccls. or 261/146-147.ccls. or 261/150.ccls.) or (261/19-22.ccls. or 261/23.1.ccls. or 261/40.ccls. or 261/42.ccls. or 261/62-63.ccls.) or (261/64.1.ccls. or 261/65.ccls. or 261/75-76.ccls. or 261/94-96.ccls. or 261/100-102.ccls. or 261/105.ccls. or 261/108-109.ccls. or 261/113.ccls. or 261/114.1.ccls.)) and ((lid or cap or top) same (reactor or chamber or vessel or tank or station or hous\$3 or encase\$4 or container))) and ((channels or conduits or pipes or paths or manifold) with gas)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:54
127	744	((118/715.ccls. or 118/728.ccls. or 118/50.ccls. or 156/345.29.ccls. or 156/345.33.ccls. or 156/345.34.ccls. or 156/345.35.ccls. or 156/345.36.ccls. or 156/345.26.ccls. or 156/345.51.ccls.) or (137/262-264.ccls. or 137/454.2 or 137/560.ccls. or 137/561r.ccls. or 137/561a.ccls. or 137/571-576.ccls. or 137/590.ccls. or 137/594-596.ccls. or 137/599.01.ccls. or 137/599.05-599.07.ccls. or 137/602.ccls.) or (141/285-286.ccls. or 141/37.ccls. or 141/44-47.ccls. or 141/54.ccls. or 141/301-302.ccls. or 141/367.ccls.) or (261/127.ccls. or 261/131.ccls. or 261/146-147.ccls. or 261/150.ccls.) or (261/19-22.ccls. or 261/23.1.ccls. or 261/40.ccls. or 261/42.ccls. or 261/62-63.ccls.) or (261/64.1.ccls. or 261/65.ccls. or 261/75-76.ccls. or 261/94-96.ccls. or 261/100-102.ccls. or 261/105.ccls. or 261/108-109.ccls. or 261/113.ccls. or 261/114.1.ccls.)) and ((lid or cap or top) same (reactor or chamber or vessel or tank or station or hous\$3 or encase\$4 or container))) and (((channels or conduits or pipes or paths or manifold) with gas) same valves)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 11:55

# Patent Assignment Abstract of Title

**Total Assignments: 1**

**Application #:** 09798258 **Filing Dt:** 03/02/2001

**Patent #:** NONE

**Issue Dt:**

**PCT #:** NONE

**Publication #:** 20020121241

**Pub Dt:** 09/05/2002

**Inventors:** Anh N. Nguyen, Michael X. Yang, Ming Xi, Hua Chung, Anzhong Chang, Xiaoxiong Yuan, Siqing Lu

**Title:** Processing chamber and method of distributing process fluids therein to facilitate sequential deposition of films

**Assignment: 1**

**Reel/Frame:** 011873/0058

**Received:**  
06/12/2001

**Recorded:**  
06/06/2001

**Mailed:**  
08/18/2001

**Pages:** 15

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignors:** NGUYEN, ANH N.

**Exec Dt:** 05/08/2001

YANG, MICHAEL

**Exec Dt:** 05/07/2001

XI, MING

**Exec Dt:** 05/09/2001

CHUNG, HUE

**Exec Dt:** 05/07/2001

CHANG, ANZHONG

**Exec Dt:** 05/08/2001

YUAN, XIAOXIONG

**Exec Dt:** 05/09/2001

LU, SIQING

**Exec Dt:** 05/07/2001

**Assignee:** APPLIED MATERIALS, INC. ✓

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Search Results as of: 6/10/2003 3:12:05 P.M.

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Web interface last modified: Oct. 5, 2002

09/798,258	} 10/016,300 CDP.	09/798,258	09/798,251
09/798,251		12-19 X	1-22
	1-51		

## Patent Assignment Abstract of Title

**Total Assignments:** 1

**Application #:** 09798251 **Filing Dt:** 03/02/2001

**Patent #:** NONE

**Issue Dt:**

**PCT #:** NONE

**Publication #:** 20020121342 **Pub Dt:** 09/05/2002

**Inventors:** Anh N. Nguyen, Michael X. Yang, Ming Xi, Hua Chung, Anzhong Chang, Xiaoxiong Yuan, Siqing Lu

**Title:** Lid assembly for a processing system to facilitate sequential deposition techniques

**Assignment: 1**

**Reel/Frame:** 011870/0574 **Received:** 06/12/2001 **Recorded:** 06/06/2001 **Mailed:** 08/17/2001 **Pages:** 15

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignors:** NGUYEN, ANH N. ✓

**Exec Dt:** 05/18/2001

YANG, MICHAEL ✓

**Exec Dt:** 05/07/2001

XI, MING ✓

**Exec Dt:** 05/09/2001

CHUNG, HUA ✓

**Exec Dt:** 05/07/2001

CHANG, ANZHONG ✓

**Exec Dt:** 05/08/2001

YUAN, XIAOXIONG ✓

**Exec Dt:** 05/09/2001

LU, SIQING ✓

**Exec Dt:** 05/07/2001

**Assignee:** APPLIED MATERIALS, INC. ✓

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Search Results as of: 6/10/2003 3:12:24 P.M.

If you have any comments or questions concerning the data displayed, contact OPR / Assignments at 703-308-9723  
Web interface last modified: Oct. 5, 2002

# Patent Assignment Abstract of Title

**Total Assignments: 2**

**Application #:** 09678266

**Filing Dt:** 10/03/2000

**Patent #:** NONE

**Issue Dt:**

**PCT #:** NONE

**Publication #:** NONE

**Pub Dt:**

**Inventors:** Ming Xi, Ashok Sinha, Moris Kori, Alfred W. Mak, Xinliang Lu, Ken Kuang Lai, Karl A. Littau

**Title:** METHOD AND APPARATUS FOR DEPOSITING REFRACTORY METAL LAYERS  
EMPLOYING SEQUENTIAL DEPOSITION TECHNIQUES TO FORM A NUCLEATION LAYER

**Assignment: 1**

**Reel/Frame:** 011573/0666

**Received:**  
03/14/2001

**Recorded:**  
02/09/2001

**Mailed:**  
05/16/2001

**Pages:** 15

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignors:** XI, MING

**Exec Dt:** 01/09/2001

SINHA, ASHOK

**Exec Dt:** 01/08/2001

KORI, MORIS

**Exec Dt:** 01/18/2001

MAK, ALFRED W.

**Exec Dt:** 01/09/2001

BYUN, JEONG SOO

**Exec Dt:** 01/08/2001

LEI, LAWRENCE CHUNG-LAI

**Exec Dt:** 01/09/2001

CHUNG, HUA

**Exec Dt:** 01/08/2001

**Assignee:** APPLIED MATERIALS, INC.

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**Assignment: 2**

**Reel/Frame:** 012282/0762

**Received:**  
10/30/2001

**Recorded:**  
10/19/2001

**Mailed:**  
01/08/2002

**Pages:** 7

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignors:** LU, XINLIANG

**Exec Dt:** 08/10/2001

LAI, KEN KAUNG

**Exec Dt:** 08/13/2001

LITTAU, KARL A.

**Exec Dt:** 08/10/2001

**Assignee:** APPLIED MATERIALS, INC.

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